



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,256	07/11/2003	Mary B. Clark	1033-SS00387	3946

60533 7590 01/16/2007
TOLER SCHAFFER, LLP
5000 PLAZA ON THE LAKES
SUITE 265
AUSTIN, TX 78746

EXAMINER

JEAN GILLES, JUDE

ART UNIT	PAPER NUMBER
----------	--------------

2143

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/618,256

Applicant(s)

CLARK ET AL.

Examiner

Jude J. Jean-Gilles

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>04/09/2004, 10/15/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is responsive to communication filed on 01/29/2003.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (hereinafter Jones) U.S. Patent No. 6,804,330 in view of Givoly et al (Givoly) U.S. Patent No. 7,124,204 B2.

Regarding claim 1: Jones discloses the invention substantially as claimed. Jones teaches a multi-user database system comprising:

at least one processor (fig. 33, item 604);

at least one network interface coupled to the at least one processor, the at least one

network interface configured to receive transactions from a plurality of users

(column 35, lines 15-34; column 39, lines 55-63; note that the inputs are the

transactions received from the users), transactions including session maintenance

transactions and data requests (column 35, lines 34-55);

an accounting table to store data associated with the data requests (fig. 14, item 218;

column 20, lines 50-52); however Jones does not disclose the details of "an event table

to store an event log of the session maintenance transactions and a session table

derived from the event table and the accounting table, the session table to store resource usage data associated with at least one user session”.

In the same field of endeavor, Givoly discloses ” ... *For example, the components of the data being synchronized may have a value amount associated therewith. Specifically, such components may refer to network events or usage which each have an associated monetary value... The information on network sessions is stored in the database in the form of a table. Each field in the table represents a network session parameter. Each record describes a network session. The system 500 has a set of pre-defined fields that are configured by the CEM 570 on installation. The NSP can modify the central database 575 structure by adding, deleting, or modifying fields...*” [see Givoly; column 3, lines 11-25; column 11, lines 58-66].

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Givoly’s teachings of using both an event table and a session table to store the resource data associated with a user session with the teachings of Jones, for the purpose of improving the ability of a network “...*to provide a technique of quantifying the loss of data during database synchronization for the purpose of increasing a speed of the synchronization to a maximum threshold...as the lack of proper synchronization of database tables is based on determined number of affected users ...*” as stated by Givoly in lines 55-58 of column 1(see also column 2, lines 22-27. By this rationale, **claim 1** is rejected.

Regarding claim 2: the combination Jones- Givoly discloses the multi-user database system of claim 1, wherein the resource usage data includes CPU usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 3: the combination Jones- Givoly discloses the multi-user database system of claim 1, wherein the resource usage data includes input/output usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 4: the combination Jones- Givoly discloses the multi-user database system of claim 1, wherein the at least one processor comprises more than one processor in a parallel processing environment (see Jones; column 30, lines 20-39).

Regarding claim 5: the combination Jones- Givoly discloses the multi-user database system of claim 4, wherein the parallel processing environment is associated with an enterprise data warehouse (see Jones; column 30, lines 20-39).

Regarding claim 6: the combination Jones- Givoly discloses the multi-user database system of claim 1, further comprising: a request table derived from the event table and the accounting table, the request table to store resource usage data associated with the data requests [see Givoly; column 3, lines 11-25; column 11, lines 58-66].

Regarding claim 7: the combination Jones- Givoly discloses the multi-user database system of claim 6, wherein the request table is accessible to identify data requests that utilize a selected level of computing resources (see Givoly; column 13, lines 59-67; column 14, lines 1-9).

Regarding claim 8: the combination Jones- Givoly discloses the multi-user database system of claim 1, wherein the session table is accessible to identify sessions that utilize a selected level of computing resources (see Givoly; column 13, lines 59-67; column 14, lines 1-9).

Regarding claim 9: the combination Jones- Givoly discloses the multi-user database system of claim 1, wherein the session table is accessible to identify usage trends for resource utilization forecasting (see Givoly; column 13, lines 59-67; column 14, lines 1-9).

Regarding claim 10: the combination Jones- Givoly discloses a multi-user database system comprising:

a processor (see Jones; fig. 33, item 604);

a network interface coupled to the processor, the network interface configured to receive transactions from a plurality of users (see Jones; column 35, lines 15-34;

column 39, lines 55-63), the transactions including session maintenance transactions and data requests (see Jones; column 35, lines 34-55);

an event table to store an event log of the session maintenance transactions [see Givoly; column 3, lines 11-25; column 11, lines 58-66];

an accounting table to store data associated with the data requests(see Jones; fig. 14, item 218; column 20, lines 50-52); and

a request table derived from the event table and the accounting table, the request table to store resource usage data associated with the transactions [see Givoly; column 3, lines 11-25; column 11, lines 58-66].

Regarding claim 11: the combination Jones- Givoly discloses the multi-user database system of claim 10, wherein the resource usage data includes CPU usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 12: the combination Jones- Givoly discloses the multi-user database system of claim 10, wherein the resource usage data includes input/output usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 13: the combination Jones- Givoly discloses the multi-user database system of claim 10, wherein the request table is accessible to identify data requests that utilize a selected level of computing resources(see Jones; column 30, lines 20-39).

Regarding claim 14: the combination Jones- Givoly discloses the multi-user database system of claim 10, further comprising more than one processor in a parallel processing environment(see Jones; column 30, lines 20-39).

Regarding claim 15: the combination Jones- Givoly discloses the multi-user database system of claim 14, wherein the parallel processing environment is associated with an enterprise data warehouse(see Jones; column 30, lines 20-39).

Regarding claim 16: the combination Jones- Givoly discloses the multi-user database system of claim 10, further comprising: a session table derived from the event table and the accounting table, the session table to store resource usage data associated with at least one user session [see Givoly; column 3, lines 11-25; column 11, lines 58-66].

Regarding claim 17: the combination Jones- Givoly discloses the multi-user database system of claim 16, wherein the session table is accessible to identify high resource utilization sessions (see Givoly; column 13, lines 59-67; column 14, lines 1-9).

Regarding claim 18: the combination Jones- Givoly discloses the multi-user database system of claim 16, wherein the session table is accessible to identify usage trends for resource utilization forecasting (see Givoly; column 13, lines 59-67; column

14, lines 1-9).

Regarding claim 19: the combination Jones- Givoly discloses a method of tracking database system usage, the method comprising:

determining a set of new sessions from an event log data table to form a temporary session data table (see Givoly; column 11, lines 57-67; column 12, lines 1-28);

matching entries in the temporary sessions data table with a set of request transactions to form a matched data table (see Givoly; column 11, lines 57-67; column 12, lines 1-28);

preparing a sessions level summary from the matched data table [see Givoly; column 3, lines 11-25; column 11, lines 58-66];

updating a session table, the session table to store resource usage data associated with the set of new sessions; and querying the sessions table to track database system usage [see Jones ; column 35, lines 34-55; see Givoly; column 3, lines 11-25; column 11, lines 58-67].

Regarding claim 20: the combination Jones- Givoly discloses the method of claim 19, wherein the resource usage data includes CPU usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 21: the combination Jones- Givoly discloses the method of claim

19, wherein the resource usage data includes input/output usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 22: the combination Jones- Givoly discloses the method of claim 19, further comprising: determining a set of open sessions; and associating the set of open sessions with logoff events stored in the event log data table (see Jones; column 20, lines 18-43).

Regarding claim 23: the combination Jones- Givoly discloses the method of claim 19, further comprising: determining a set of open sessions; associating running sessions with open sessions in the set of open sessions; and closing open sessions not associated with running sessions (see Jones; column 30, lines 20-39).

Regarding claim 24: the combination Jones- Givoly discloses the method of claim 19, further comprising: preparing a request level summary from the matched data table; updating a request table, the request table to store resource usage data associated with the set of request transactions; and querying the request table to track resource usage [see Givoly; column 3, lines 11-25; column 11, lines 58-66].

Regarding claim 25: the combination Jones- Givoly discloses the method of claim 24, wherein querying the request table includes providing data associated with resource inefficient transaction requests (see Givoly; column 13, lines 59-67; column 14, lines 1-

9).

Regarding claim 26: the combination Jones- Givoly discloses the method of claim 25, further comprising: modifying the resource inefficient transaction requests whereby database performance is enhanced (see Jones; column 30, lines 20-39).

Regarding claim 27: the combination Jones- Givoly discloses the method of claim 19, wherein querying the sessions table yields data associated with usage trends (see Jones; column 30, lines 20-39).

Regarding claim 28: the combination Jones- Givoly discloses the method of claim 27, further comprising: allocating database resources based on the data associated with usage trends (see Jones; column 30, lines 20-39).

Regarding claim 29: the combination Jones- Givoly discloses the method of claim 19, wherein matching entries in the temporary session data table is performed using a user identifier and a session identifier (see Givoly; column 13, lines 59-67; column 14, lines 1-9).

Regarding claim 30: the combination Jones- Givoly discloses the method of claim 19, wherein matching entries in the temporary session data table is performed using a

Art Unit: 2143

user identifier and an account string (see Givoly; column 13, lines 59-67; column 14, lines 1-9).

Conclusion

3. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3719.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Jude Jean-Gilles

Patent Examiner

Art Unit 2143

JJG

December 29, 2006


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100